

Annex 7

21 September 1962

UNIT: CIA Automatic Data Processing Staff, DD/S

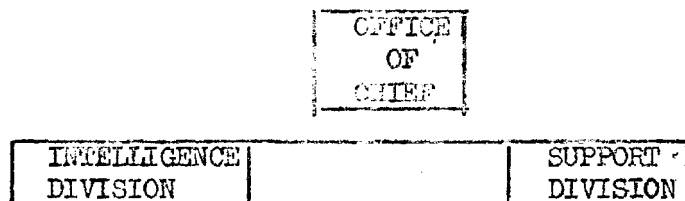
MISSION:

To provide Agency-wide leadership and staff assistance in the development and coordination of automatic data processing activities. Specifically, the ADPS is charged with:

1. Giving direction and guidance to Agency officials in the application of ADP equipment.
2. Conducting Agency-wide studies to determine the feasibility of applying ADP methods and designing the necessary procedures and/or systems for operations where ADP has been determined to be advantageous.
3. Approving all request for the purchase or lease of ADP equipment.

25X1 AUTHORIZED STRENGTH: ON DUTY STRENGTH: 25X1

GENERAL ORGANIZATION:



WORKLOAD STATISTICS:

In FY 1961, the Agency spent approximately \$400,000 in computer rentals and \$600,000 in electric accounting machines rental. In FY 1963 approximately \$1,000,000 will be spent for rental of computer, and \$500,000 for rental of EAM equipment. The EAM rental bill will be \$100,000 a year less in 1963 due to the shift of workload from this type of equipment to computers. The annual salaries of personnel directly connected with the planning and operational phases of ADP equipment throughout the Agency will be approximately \$1,650,000. There will be about

GENERAL OBSERVATIONS:

The need for computers in the Agency is steadily increasing. All offices in the DD/S are interested in computers and the majority of them have justifiable computer applications. Studies made of the requirements in the DD/I Area indicate the need to establish a DD/I computer center. This has been recognized by the DD/I who has approved a T/O for such a center.

S-E-C-R-E-T

-1-

Computers are normally used in three major areas:

1. Scientific computation - used extensively by the Air Force during World War II.
2. Business data processing - used extensively for clerical operations in both industry and government, particularly in accounting operations.
3. Information storage and retrieval - used for handling nonnumerical data. The Agency has use for all three kinds of computation. Because of the potential need for computers by the Agency, ADPS was established on 1 June 1961 as a staff under the DD/S.

STATEMENT BY CHIEF, ADPS:

1. The Chief, ADPS chairs an Automatic Data Processing Committee composed of one member from each directorate. It reviews all requests and proposals for the purchase or lease of ADP equipment and systems and makes recommendations for action to be taken thereon.

2. The ADP Staff is organized into two divisions; the Intelligence Division, which serves the DD/I Area, and the Support Division which serves the Office of the Comptroller and the DD/S Area. DD/P requirements are handled by the Chief and Deputy Chief with the assistance of members of the DD/I and DD/S Divisions as required.

3. Current programs of the Support Division and the Intelligence Division can be briefly described as follows:

a. The Support Division serves the components of the DD/S Area, that is Medical, Communications, Logistics, Personnel, Security and Training, and the Office of the Comptroller; DCI.

(1) Present Objectives

Automatic Data Processing methods have been applied to some but not all of the operating requirements of the Offices of the Comptroller, Personnel and Logistics through the use of an RCA 501 Electronic Computer. These computer procedures were for several reasons established in part by a direct conversion from punched-card procedures and do not make full use of the capabilities of the 501 Computer. The Support Division is now reviewing these procedures in conjunction with a study of the total requirements of each of these components. As a result of this work, the present procedures will be up-dated and extended to meet the total requirements of each component. Furthermore, the procedures developed for one component will be integrated with those of the other components wherever feasible.

(2) In the Offices of Security, Communication, Medical and Training, ADP methods have not been applied to the extent that they have in DD/S components discussed above. A preliminary review of the operating requirements of those offices has been made and it is evident from this review that ADP methods can be advantageously applied. The Support Division is now in the process of making detailed studies of those requirements and based on the findings of the studies, will develop and design ADP systems which will more efficiently and economically meet the needs of each office.

(a) Some areas for ADP development in the DD/S are:

Communications: Automatic Message Switching, Message Storage, Retrieval, and Distribution

Logistics: Real Estate Records, Inventory Control, Property Accountability, Budget Control, Automatic Composition for Printing Services Division.

Medical Staff: Analysis of analog data such as EKG's, Medical Records, Storage and Retrieval, Psychological Test Evaluations.

Comptroller: Improved Accounting and Cost Control.

Security: Automatic Name Checks, File Control Information Storage and Retrieval.

Personnel: Personnel Qualifications Index, Consultant's Conflict of Interest Review procedures.

Training: Training Records and Statistics, Protection of Training Requirements.

Legal Counsel: Storage and Retrieval of Legal Data.

(3) In addition to its responsibilities for developing ADP systems, the Support Division also has the responsibility for:

(a) Keeping abreast of all new ADP equipment which comes on the market, evaluating those equipments for use in the Agency and disseminating the information to the proper agency components.

S-E-C-R-E-T

(b) Maintaining inventory and utilization records of all ADP equipment installed in the Agency.

(c) Acting as the Agency contact point for all equipment manufacturers who wish to do business with the Agency.

(d) Reviewing all requisitions for the purchase or lease of ADP equipment and other office business machines.

b. The Intelligence Division is responsible for the investigation, analysis, design and implementation of automatic data processing systems, in collaboration with appropriate operating elements in the DD/I Area.

(1) The problems in the DD/I Area are concerned with:

- (a) Intelligence Analysis
- (b) Document Indexing and Storage
- (c) Information Retrieval
- (d) Analog Data Analysis
- (e) Photogrammetric Calculations
- (f) Mechanical Translation of Language

(2) The application of ADP methods to the problems listed above are much more difficult to solve than those found in the DD/S Area. The reason for this is that administrative type problems have been mechanized in varying degrees for some time. The intelligence problems, with the exception of straight forward mathematical computation, have not been fully mechanized and there is little, if any, prior experience on which to draw.

(3) While the Agency has made more progress than any other Agency in the intelligence field in applying machine methods to the indexing and retrieval of documents, no ADP system for the indexing and retrieval of the informational content of documents has as yet been developed. This is also true of some problems in the field of intelligence analysis.

S-E-C-R-E-T

-4-

(4) To gather and study all the pertinent facts, and on the basis of those facts, to develop and ADP information retrieval system which will meet the requirements of intelligence research analysis, will require keen ingenuity and imagination and a substantial number of man years to develop and design. To implement such a system may require research and development effort on the part of equipment manufacturers to produce unique types of machines for the system.

(5) It is, therefore, evident that the major effort of the Intelligence Division for the next few years will be to bring into being a mechanized Information Retrieval System which will meet the needs of our Research Intelligence Analysts.

(6) There are, however, other problems in the Intelligence Area which can be more easily solved than the information Retrieval problem. These problems are not too difficult to define and are, in the main, concerned with computation of data, analyses, statistics, updating of tables and the like. The Intelligence Division has identified approximately 15 of these problems which are called "Special Projects." Some of these have been fully developed and are being processed by computers on a regular schedule. The other projects are in varying stages of completion of machine processing.

(7) In addition to the above established programs of work, the Intelligence Division is always on call to serve the DD/I offices on any matter pertaining to ADP methods.

4. In the DD/P Area, the "Walnut" system for automatic storage and retrieval of documents through the use of microphotographic techniques is far advanced. Special equipment designed for this purpose will be delivered in January 1963. These machines will be complemented later by a unique magnetic tape index machine which will be used to automatically perform name trace operations. Studies are also being made to apply computer techniques to operational problems.

5. The DD/R may require some type of electronic equipment for the ELINT program.

6. NPIC now has two Alvac Computers for photogrammetric computations. These machines will be replaced by a more sophisticated computer in January 1963.

TASK FORCE CONCLUSIONS:

We believe that the strength of the Automatic Data Processing Staff is about right. The Task Force desires to call attention to the fact that the development of automatic data processing systems within the Agency over the next few years is going to result in heavy demands for personnel and money. The Task Force believes that these systems should be continually reviewed to assure the Agency the maximum benefits and to make sure that lessons learned by one element are made available to other elements.

S-E-C-R-E-T

-6-